

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/572,342	03/17/2006	B. Wesley Trotter	21334YP	1344
210 MERCK AND	0 7590 10/05/2007 IERCK AND CO., INC		EXAMINER	
P O BOX 2000			ROBINSON, BINTA M	
RAHWAY, N.	J 07065-0907		ART UNIT PAPER NUMBER	
			MAIL DATE	DELIVERY MODE
			10/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	T.,		•			
	· · · · · · · · · · · · · · · · · · ·	Application No.	Applicant(s)			
Office Action Summary		10/572,342	TROTTER			
		Examiner	Art Unit			
		Binta M. Robinson	1625			
Period fe	The MAILING DATE of this communication or Reply	on appears on the cover sheet w	ith the correspondence address			
WHIO - External after af	IORTENED STATUTORY PERIOD FOR FOR CHEVER IS LONGER, FROM THE MAILING ensions of time may be available under the provisions of 37 of r SIX (6) MONTHS from the mailing date of this communication of period for reply is specified above, the maximum statutory ure to reply within the set or extended period for reply will, by reply received by the Office later than three months after the led patent term adjustment. See 37 CFR 1.704(b).	NG DATE OF THIS COMMUNI CFR 1.136(a). In no event, however, may a ion. period will apply and will expire SIX (6) MOI statute, cause the application to become A	CATION. reply be timely filed NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).			
Status						
1)	Responsive to communication(s) filed on	· .				
2a) <u></u> ☐	This action is FINAL . 2b)⊠	This action is non-final.				
3)□	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice ur	nder <i>Ex parte Quayle</i> , 1935 C.[D. 11, 453 O.G. 213.			
Disposit	tion of Claims					
4)🖂	Claim(s) 1-23 is/are pending in the applic	cation.				
	4a) Of the above claim(s) 8-18 and 21-23 is/are withdrawn from consideration.					
5) 🗌	Claim(s) is/are allowed.					
6)⊠	6)⊠ Claim(s) <u>1-7,19 and 20</u> is/are rejected.					
·	Claim(s) is/are objected to.					
8)[Claim(s) are subject to restriction	and/or election requirement.				
Applicat	ion Papers					
9)□	The specification is objected to by the Exa	aminer.				
10)	The drawing(s) filed on is/are: a)	☐ accepted or b)☐ objected to	by the Examiner.			
	Applicant may not request that any objection	to the drawing(s) be held in abeya	nce. See 37 CFR 1.85(a).			
	Replacement drawing sheet(s) including the o	correction is required if the drawing	g(s) is objected to. See 37 CFR 1.121(d).			
11)	The oath or declaration is objected to by t	the Examiner. Note the attache	d Office Action or form PTO-152.			
Priority	under 35 U.S.C. § 119					
•	Acknowledgment is made of a claim for for All b) Some * c) None of: 1. Certified copies of the priority docu		§ 119(a)-(d) or (f).			
	2. Certified copies of the priority docu		Application No.			
•	3. Copies of the certified copies of the					
	application from the International E	· •				
*	See the attached detailed Office action for	a list of the certified copies not	t received.			
			·			
Attachme	• •	_				
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-9-		Summary (PTO-413) (s)/Mail Date			
3) 🛛 Info	ce of Dransperson's Patent Drawing Review (P10-94) rmation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date <u>6/12/06;4/30/07</u> .	· - /	Informal Patent Application			

Art Unit: 1625

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- 1. Claims 1-7, 19-20, drawn to the compounds, classified in class 546, subclass 141.
- II. Claims 8-18, 21-23, drawn to various uses of the compound, classified in class 514, subclass 307.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case, the product can be used in various different material uses such as treating a cardiac arrhythmia or a stroke.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art due to their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Claims 1-6, 8-23 are generic to the following disclosed patentably distinct species: A, R1, R2, R6, R8, R9, R10 through R84 Y, G, Ra through RI, n, p, q, r, s, and t. The species are independent or distinct because alternative members of the genus

Art Unit: 1625

are not obvious over one another and do not share the same properties. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.

MPEP § 809.02(a).

During a telephone conversation with Attorney Richard Parr on 9/19/07 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-7, 19, 20 and the species of the second compound in claim 7 was elected. Affirmation of this election must be made by applicant in replying to this Office action. Claims 8-18, 21-23 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

Application/Control Number: 10/572,342

Art Unit: 1625

remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The examiner has required restriction between product and process claims.

Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder.

All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Art Unit: 1625

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim(s) 1-3, 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamada et. al.(Hcaplus 135: 371759) (See Reference N). Hcaplus 135: 371759 discloses the instant compound

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN

RN 65810-96-0 REGISTRY

ED Entered STN: 16 Nov 1984

Isoquinoline, 1-chloro-4-phenyl- (6CI, 9CI) (CA INDEX NAME)
OTHER NAMES:

CN 1-Chloro-4-phenylisoquinoline

4F C15 H10 C1 N

LC SIN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, TOXCENTER, USPATFULE (*File contains numerically searchable property data)

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Page 6

Claims 1-7, 19, 20 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for making salts of the claimed compounds, does not reasonably provide enablement for making all'crystal forms and hydrates of the claimed compounds. The specification does not enable any person skilled in the art of synthetic organic chemistry to make the invention commensurate in scope with these claims. "The factors to be considered [in making an enablement rejection] have been summarized as a) the quantity of experimentation necessary, b) the amount of direction or guidance presented, c) the presence or absence of working examples, d) the nature of the invention, e) the state of the prior art, f) the relative skill of those in that art, g) the predictability or unpredictability of the art, h) and the breadth of the claims", In re Rainer, 146 USPQ 218 (1965); In re Colianni, 195 USPQ 150, Ex parte Formal, 230 USPQ 546. In the present case the important factors leading to a conclusion of undue experimentation are the absence of any working example of a formed hydrate or crystal form, the lack of

c) There is no working example of any hydrate or crystal form formed. The claims are drawn to hydrates and crystal forms, yet the numerous examples presented all failed to produce a hydrate or crystal form. These cannot be simply willed into existence. As was stated in *Morton International Inc. v. Cardinal*

predictability in the art, and the broad scope of the claims.

Application/Control Number: 10/572,342 Page 7

Art Unit: 1625

Chemical Co., 28 USPQ2d 1190 "The specification purports to teach, with over fifty examples, the preparation of the claimed compounds with the required connectivity. However ... there is no evidence that such compounds exist... the examples of the '881 patent do not produce the postulated compounds... there is ... no evidence that such compounds even exist." The same circumstance appears to be true here. There is no evidence that hydrates or crystal forms of these compounds actually exist; if they did, they would have formed. Hence, applicants must show that solvates can be made, or limit the claims accordingly.

h) The breadth of the claims includes all of the hundreds of thousands of compounds of formula I as well as the presently unknown list of compounds embraced by the term "hydrates" and "crystal forms". Thus, the scope is broad.

MPEP 2164.01(a) states, "A conclusion of lack of enablement means that, based on the evidence regarding each of the above factors, the specification, at the time the application was filed, would not have taught one skilled in the art how to make and/or use the full scope of the claimed invention without undue experimentation. *In re Wright*, 999 F.2d 1557,1562, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993)." That conclusion is clearly justified here. Thus, undue experimentation will be required to practice Applicants' invention.

Application/Control Number: 10/572,342

required. See MPEP §§ 602.01 and 602.02.

Art Unit: 1625

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is

The oath or declaration is defective because:

The full name of each inventor (family name and at least one given name together with any initial) has not been set forth.

The first name of Inventor Mr. Trotter is abbreviated.

The elected species is allowable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binta M. Robinson whose telephone number is (571) 272-0692. The examiner can normally be reached on M-F (9:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Janet Andres can be reached on 571-272-0867.

A facsimile center has been established. The hours of operation are Monday through Friday, 8:45 AM to 4:45 PM. The telecopier numbers for accessing the facsimile machine are (703)308-4242, (703)305-3592, and (703)305-3014.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)-272-1600.

BMR

September 20, 2007

unto Robenson

CURERVISORY PATENT EXAMINER

Page 8